Clean Version Of Amended Claims

25. (four times amended) A semiconductor component comprising:

a substrate having a first surface and an opposing second surface;

a blanket deposited conductive layer on the first surface;

a plurality of conductors on the first surface defined by a plurality of laser machined grooves through the conductive layer to the substrate, the conductors comprising portions of the conductive layer electrically isolated by the grooves and separated by remaining portions of the conductive layer;

at least one semiconductor die on the substrate in electrical communication with the conductors;

a plurality of conductive vias in the substrate from the first surface to the second surface in electrical communication with the conductors; and

a plurality of external contacts on the second surface in electrical communication with the conductive vias.

30. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer substantially covering the surface and having a thickness;

a plurality of conductors and pads on the surface defined by a plurality of laser machined grooves through the thickness of the conductive layer to the substrate extending on the surface in a plurality of directions, each conductor and each pad comprising a portion of the conductive layer electrically isolated by at least one pair of laser machined grooves; and

a semiconductor die flip chip mounted or wire bonded to the pads.

35. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer on the surface;

a plurality of conductors on the surface comprising portions of the conductive layer, the conductors defined and electrically isolated by a plurality of laser machined grooves through the conductive layer to the substrate, each conductor defined by at least one pair of laser machined grooves;

a semiconductor die on the substrate in electrical communication with the conductors; and

an encapsulant on the substrate covering the die and the conductive layer.

36. (thrice amended) The semiconductor component of claim 35 wherein the die is flip chip mounted or wire bonded to the conductors.

47. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer substantially covering the surface; and

a plurality of conductors on the surface defined by a plurality of laser machined grooves through the conductive layer to the surface and extending in a plurality of directions on the surface, the conductors comprising portions of the conductive layer which are electrically isolated from one another by the laser machined grooves, the portions of the conductive layer including first contacts on first ends thereof configured for bonding, and second contacts on second ends thereof configured for electrical connection to external circuitry; and

a semiconductor die on the substrate bonded to the first contacts.

52. (thrice amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer on the surface;

a plurality of conductors on the surface defined by a plurality of first laser machined grooves through the conductive layer to the surface, the conductors comprising portions of the conductive layer electrically isolated by the grooves and separated by remaining portions of the conductive layer;

a plurality of contacts on the conductors defined by a plurality of second laser machined grooves through the conductive layer to the surface;

a plurality of conductive vias through the substrate in electrical communication with the conductors; and

a semiconductor die on the substrate in electrical communication with the contacts.

Clean Version Of All Pending Claims

25. (four times amended) A semiconductor component comprising:

a substrate having a first surface and an opposing second surface;

a blanket deposited conductive layer on the first surface;

a plurality of conductors on the first surface defined by a plurality of laser machined grooves through the conductive layer to the substrate, the conductors comprising portions of the conductive layer electrically isolated by the grooves and separated by remaining portions of the conductive layer;

at least one semiconductor die on the substrate in electrical communication with the conductors;

a plurality of conductive vias in the substrate from the first surface to the second surface in electrical communication with the conductors; and

a plurality of external contacts on the second surface in electrical communication with the conductive vias.

26. (thrice amended) The semiconductor component of claim 25 wherein the conductors comprise a plurality of pads and the semiconductor die is wire bonded to the pads.

27. (thrice amended) The semiconductor component of claim 25 wherein the semiconductor die is flip chip mounted to the conductors.

28. (twice amended) The semiconductor component of claim 25 wherein the substrate comprises a material selected from the group consisting of plastic, glass filled resin, silicon, ceramic, metal, germanium, and gallium arsenide.

29. (twice amended) The semiconductor component of claim 25 wherein the conductors comprise a plurality of contacts adapted for electrical connection to outside circuitry.

30. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer substantially covering the surface and having a thickness;

a plurality of conductors and pads on the surface defined by a plurality of laser machined grooves through the thickness of the conductive layer to the substrate extending on the surface in a plurality of directions, each conductor and each pad comprising a portion of the conductive layer electrically isolated by at least one pair of laser machined grooves; and

a semiconductor die flip chip mounted or wire bonded to the pads.

31. (twice amended) The semiconductor component of claim 30 further comprising a plurality of contacts on the conductors adapted for electrical connection to outside circuitry.

32. (twice amended) The semiconductor component of claim 30 further comprising a plurality of conductive vias in the substrate in electrical communication with the conductors and with a plurality of contact balls on a second surface of the substrate.

33. (twice amended) The semiconductor component of claim 30 wherein the component comprises a chip module, a multi chip module or a package.

34. (twice amended) The semiconductor component of claim 30 further comprising an encapsulant at least partially covering the semiconductor die and at least a portion of the surface.

35. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer on the surface;

a plurality of conductors on the surface comprising portions of the conductive layer, the conductors defined and electrically isolated by a plurality of laser machined grooves through the conductive layer to the substrate, each conductor defined by at least one pair of laser machined grooves;

a semiconductor die on the substrate in electrical communication with the conductors; and

an encapsulant on the substrate covering the die and the conductive layer.

36. (thrice amended) The semiconductor component of claim 35 wherein the die is flip chip mounted or wire bonded to the conductors.

37. (twice amended) The semiconductor component of claim 35 wherein the conductors comprise pads bonded to the die and contacts adapted for electrical connection to outside circuitry.

38. (twice amended) The semiconductor component of claim 35 wherein the substrate comprises a semiconductor material and an electrically insulating layer on the surface.

39. (twice amended) The semiconductor component of claim 35 wherein the substrate comprises a material

selected from the group consisting of plastic, glass filled resin, ceramic, silicon, metal, germanium, and gallium arsenide.

47. (four times amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer substantially covering the surface; and

a plurality of conductors on the surface defined by a plurality of laser machined grooves through the conductive layer to the surface and extending in a plurality of directions on the surface, the conductors comprising portions of the conductive layer which are electrically isolated from one another by the laser machined grooves, the portions of the conductive layer including first contacts on first ends thereof configured for bonding, and second contacts on second ends thereof configured for electrical connection to external circuitry; and

a semiconductor die on the substrate bonded to the first contacts.

48. (amended) The semiconductor component of claim 47 wherein the semiconductor die is flip chip mounted or wire bonded to the first contacts.

49. (amended) The semiconductor component of claim 47 wherein each conductor has a first width of about 5 μm.

50. (amended) The semiconductor component of claim 47 wherein each groove has a second width of about 5 μm.

51. (amended) The semiconductor component of claim 47 wherein the conductive layer includes an opening for attaching the die to the substrate.

52. (thrice amended) A semiconductor component comprising:

a substrate having a surface;

a blanket deposited conductive layer on the surface;

a plurality of conductors on the surface defined by a plurality of first laser machined grooves through the conductive layer to the surface, the conductors comprising portions of the conductive layer electrically isolated by the grooves and separated by remaining portions of the conductive layer;

a plurality of contacts on the conductors defined by a plurality of second laser machined grooves through the conductive layer to the surface;

a plurality of conductive vias through the substrate in electrical communication with the conductors; and

a semiconductor die on the substrate in electrical communication with the contacts.

53. (amended) The semiconductor component of claim 52 further comprising a plurality of contact balls on the substrate in electrical communication with the conductive vias and arranged in a ball grid array.